



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,245	01/23/2004	Junichi Ide	P24851	4498

7055 7590 08/24/2006

GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

LANDRUM, EDWARD F

ART UNIT	PAPER NUMBER
----------	--------------

3724

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,245

Applicant(s)

IDE ET AL.

Examiner

Edward F. Landrum

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/3/04, 6/21/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of the use of legal phraseology such as "thereby". Correction is required. See MPEP § 608.01(b).
2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinney (U.S Patent No. 3,634,916).

Kinney teaches (see Figures 7 and 8) a cut forming machine capable of forming a circular cut in a resin layer of a disk that is larger than the diameter of a central hole in the disk. The cut forming machine comprises a table (38), a cut forming, single edged, blade section (34) having a hollow cylindrical shape, a moving means (DRIVING MEANS) for moving the cut forming blade section, an urging portion (50) disposed in the center of the cut forming blade section and capable of sliding up and down within the cut forming blade section, and an urging portion (54), a coil spring, for urging the

Art Unit: 3724

urging portion toward the table. A punching machine with a punching blade section (32) is capable of cutting through a disk shaped substrate.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinney in view of Westerman et al (U.S Patent No. 4,516,301), hereinafter Westerman.

Kinney teaches all of the elements of the current invention as stated above except a positioning protrusion being formed in the table to fit in the center hole of the disk.

Westerman teaches (see Figure 1) a support plate (20) with a positioning protrusion (24) adapted to extend through a hole of a disk (14) to accurately center the disk on the table for a cutting process.

It would have been obvious to have modified Kinney to incorporate the teachings of Westerman to provide a positioning protrusion on the support table to allow for the easy centering of a disk-shaped material with a center hole. The positioning protrusion would eliminate any alignment issues generally found when a user has to eyeball the position of a material to be cut relative to the cutting members of the cutting device.

7. Claims 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinney in view of Chambers et al (U.S Patent No. 4,379,686), hereinafter Chambers, in further view of Herbst (U.S Patent No. 3,970,023).

Kinney teaches all of the elements of the current invention as stated above except that the blades of the cut forming blade section protrude from the cut forming blade section only as far as a length equivalent to the thickness of the resin layer of the disk.

Chambers teaches (see Figure 3) the blade (129) of a cut forming blade section (128) extending a length from the bottom of the cut forming blade section that is about half the thickness of the material (134) being cut.

Herbst teaches (see Figure 4) scoring an object while only scoring one of two separate and distinct layers of a work piece for the purpose of preventing a fracture within the protective layer (3a) saving a user from having to reapply the protective enamel.

It would have been obvious to have modified Kinney to incorporate the teachings of Chambers and Herbst to provide blades for the cut forming blade section that are only as long as necessary to prevent the blade from cutting too far through the disk and potentially destroying it. Furthermore using the blades as a scoring device would help prevent any fractures in the resin layer when material inside the score was removed. Since the resin layer is designed to be a protective coating for the disk shaped substrate, preventing any fractures in the protective coating would be important to increasing the overall life of the disk.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Layman (U.S Patent No. 3,728,062), Martz (U.S Patent No. 3,584,101), Harcuba et al (U.S Patent No. 4,051,754), Mackal et al (U.S Patent No. 3,716,438), and Harper et al (U.S Patent No. 4,733,519) teach elements of the instant application.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward F. Landrum whose telephone number is 571-272-5567. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/762,245

Page 6

Art Unit: 3724

EFL

8/15/2006

A handwritten signature in black ink, appearing to be the letters 'EFL' in a stylized, cursive font.A handwritten signature in black ink, consisting of a large, stylized capital 'B' followed by a long, horizontal, wavy line.

BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER